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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/516,624

02/25/2005

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EXAMINER

YAN, REN LUO

ART UNIT

PAPER NUMBER

2854

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/516,624	<b>Applicant(s)</b> MANOUKIAN, HARUTIUN	
	<b>Examiner</b> Ren L. Yan	<b>Art Unit</b> 2854	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 July 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) 19-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18, 27 and 28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

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### **DETAILED ACTION**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7-29-2008 has been entered.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-15, 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dubuit in view of Rodi(6,019,046).

With respect to claim 1, the patent to Dubuit teaches the broadly recited station as shown in Figs. 1-4b where screen printing unit 14 and digital printing unit 15 are alternately disposed for applying one or more substances to a substrate, of the type comprising at least one mobile printing bridge(support for the screen printing unit 14 or the support for the digital printing unit 15), characterized in that it comprises the inherent means to install and means to control, the mobile printing bridge so as to selectively carry out the screen printing mode with the screen printing unit 14 or the digital printing mode with the digital printing unit 15.

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However, Dubuit does not teach to transform or convert the same mobile printing bridge from a screen printing station to a digital printing station, or vice versa as recited.

The patent to Rodi teaches the very concept of providing a printing machine with replaceable units to allow different methods of printing to take place. Specifically, Rodi teaches the use of various types of printing units 4a-4e(inkjet, electrophotographic, offset, gravure printing types) so constructed so as to be removable from the printing machine frame and to be exchangeable with one another and all of the units are modular in design having identical mounting parts for mounting to the printing frame and identical standard plug connectors for a power supply and a data exchange with a electronic data processor. See the entire Rodi parent for details.

It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the different printing units of Dubuit with identical mounting parts and the printing bridge the capability to support the various types of printing units, screen printing or digital printing, to facilitate easy conversion from one type of printing mode to another for the advantage as taught by Rodi that the various printing units are replaceable and commonly operable, respectively, without any manual interventions or adjustments due to the fact they have identical mounting parts and are controlled by an electronic data processor through the use of standard plug connectors.

Regarding claim 2, Dubuit teaches in cl. 2, lines 62-67 and cl. 3, lines 28-40 wherein said means to install said assemblies for screen printing or digital application of one or more substances comprise at least one pair of supporting elements to mount on said mobile printing bridge at least one doctor/doctor unit or at least one doctor/scrapper unit of an assembly for

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applying one or more substances in screen printing mode, and Fig. 2 to mount at least a bar 27 to support a plurality of heads 28 for applying one or more substances in digital mode.

Regarding claim 3, the combination of Dubuit and Rodi teaches the inherent structure necessary to enable alternate application of screen printing or digital printing including the means to alternatively control said assemblies for screen printing or digital application of one or more substances comprise a programmable control device to perform at least one of the following functions: data exchange under the form of signals with at least one general control unit associated with a machine to apply substances in which said station is installed; movement of said mobile printing bridge; movement of one or more mobile parts during operation in screen printing mode, and halting of said one or more mobile members during operation in digital mode; and control of the printing heads during operation in digital mode.

Regarding claims 4 and 6, Dubuit teaches the use of one or more heads 28 for ink jet type printing.

Regarding claim 5, Dubuit teaches that said one or more heads for ink jet type printing are supplied with the same substance, namely ink.

Regarding claim 7, Dubuit teaches at least two of said heads 28 for ink jet type printing are supplied with substances differing from one another, namely different color inks.

Regarding claim 8, Dubuit teaches in Figs. 1-4b a multicolor printing machine for applying substances to a substrate, of the type comprising a plurality of application stations arranged along a common production line, at least one unit for general control of said machine and means to transfer said substrate from one of said stations to another subsequent of said stations, characterized in that it comprises at least one station for applying one or more

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substances according to claim 1.

Regarding claim 9, Dubuit teaches in Figs. 2 and 3 wherein at least one of said stations is set for digital application of said one or more substances and comprises at least one printing bridge 27 which is movable in a direction perpendicular to the progress direction of said substrate.

Regarding claim 10, Dubuit teaches in Fig. 1 wherein at least one of said stations is set for digital application of said one or more substances and comprises at least one fixed printing bridge 20 which extends perpendicularly in relation to the progress direction of said substrate.

Regarding claims 11 and 13, Dubuit teaches wherein at least one of said stations is set for digital application of said one or more substances and comprises one or more heads 28 for ink jet type printing.

Regarding claim 12, Dubuit teaches wherein said one or more heads for ink jet type printing are supplied with the same substance, namely ink.

Regarding claim 14, wherein at least two of said heads for ink jet type printing are supplied with substances differing from one another, namely different color inks.

Regarding claim 15, Dubuit teaches in cl. 3, lines 7 and 8 wherein at least one drying station of said substances is provided interposed between at least two of said stations for applying said one or mores substance to said substrate.

Regarding claim 17, Dubuit teaches wherein said means for transferring said substrate from one of said stations to another subsequent of said stations comprises gripping units (object support units 13) associated with each of said stations and controlled by said general control unit.

Regarding claim 18, Dubuit teaches wherein at least one of said stations is set for digital

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application of said one or more substances and at least another of said stations is set for screen printing application of said one or more substances.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dubuit in view of Rodi as applied to claims 1 and 8 above, and further in view of EP 0687560.

Dubuit, as modified by Rodi, teaches all that is claim except that the endless conveyor 11 for transferring the substrate from one station to another is a rotating turret rather than a continuous conveyor belt as recited. EP 0687560 teaches in a multicolor printer the conventionality of using a continuous conveyor belt 2 for transferring the substrate being printed from one printing station to another(printing stations 6-9) in a linear conveying path. See Figs. 1-6 and the abstract in EP 0687560 for example. In view of the teaching of EP 0687560, it would have been obvious to one of ordinary skill in the art to provide the printing machine of Dubuit, as modified by Rodi, with a linear substrate conveying path using a continuous conveyor belt in order to facilitate registration of the print image from one station to another and to ensure print quality.

2. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dubuit in view of Rodi as applied to claim 1 above, and further in view of Terrazas et al(3,842,738).

Dubuit, as modified by Rodi teaches all that is claimed except for the mobile printing bridge including at least one common frame having at least one common movable support for use in both the digital mode and the silk-screen mode.

Terrazas et al teach in a printing station the concept of using at least one common movable support (frame members 12, 14, 15a, 15b, 16a and 16b) for quick and easy conversion

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among various printing assemblies such as lithographic, intaglio, relief, etc. printing presses. See Figs. 1-7, and the paragraph bridging columns 2 and 3 in Terrazas et al for example.

It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the printing station of Dubuit, as modified by Rodi with common frame having a common movable support as taught by Terrazas et al so as to predictably enable quick and easy conversion between the screen printing assembly and the digital printing assembly as desired.

3. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dubuit 6,397,740) in view of Terrazas et al(3,842,738).

The patent to Dubuit teaches a machine for applying substances to a substrate as claimed including a plurality of application stations 14 arranged along a common production line, at least one unit for general control of the machine and a unit 11 to sequentially transfer the substrate from one of the stations to another of the stations, at least one of the stations 14 being convertible from a screen printing mode to a digital printing mode, or vice versa shown in Figs. 1, 4a and 4b when screen printer 14 is retracted and inkjet printer 15 is substituted to affect the printing mode change.

However, Dubuit does not teach that the at least one station including at least one common movable support to support both a doctor/scrapper assembly when in the screen printing mode and a digital printing assembly when in the digital printing mode.

Terrazas et al teach in a printing station the concept of using at least one common movable support (frame members 12, 14, 15a, 15b, 16a and 16b) for quick and easy conversion among various printing assemblies such as lithographic, intaglio, relief, etc. printing presses. See Figs. 1-7, and the paragraph bridging columns 2 and 3 in Terrazas et al for example.



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It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the printing machine of Dubuit with a common movable support as taught by Terrazas et al so as to predictably enable quick and easy conversion between the screen printing assembly and the digital printing assembly as desired.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ren L. Yan whose telephone number is 571-272-2173. The examiner can normally be reached on 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on 571-272-2258. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ren L Yan/  
Primary Examiner, Art Unit 2854  
October 17, 2008